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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/782,945

02/13/2001

Edward J. A. Pope

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06/02/2006

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EXAMINER

MOORE, MARGARET G

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,945

Applicant(s)

POPE ET AL.

Examiner

Margaret G. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 58 to 78 is/are pending in the application.
- 4a) Of the above claim(s) 73-78 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 65 is/are allowed. 72
- 6) ☒ Claim(s) 1, 58 to 64, 66 to 72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

1. Newly submitted claims 73 to 78 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: These claims are drawn to a completely different process, most notably due to the fact that they result in distinct polymers

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 73 to 78 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. Claims 1, 58 to 64, 66 to 72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner cannot find support for the language "in excess of said sub-stoichiometric amount". This rejection is comparable to that found in paragraph 3 of the office action dated 4/14/04.

In response to applicants' traversal, the Examiner first notes that arguments that the language "is believed to be sufficiently definite" carries no weight. This rejection is not based on indefiniteness; it is based on lack of support in the specification. This is a new matter rejection.

Applicants then refer to pages 56 to 57 of the specification, where they note that "excess sodium acetylide is added". This does not support the phrase "in excess of said sub-stoichiometric amount". For instance, if the sub-stoichiometric amount is 9/10 of the stoichiometric amount there is nothing that would indicate that an excess of 9/10 is, in fact, intended.

If anything it would appear that the excess sodium acetylide is added in an amount sufficient to react with the unreacted chlorosilane sites (page 57, lines 4 and 5), such that the total of alkali metal (step b) and sodium acetylide is at least stoichiometric.

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This is not, however, explicit from the specification or what applicants are arguing or trying to claim. As such this rejection is maintained.

3. The disclosure is objected to because of the following informalities: Parts of the specification are quite confusing and make no sense. As an example, see Table 2, starting on page 57. As noted on line 10, $a+b=1$. For the purposes of this discussion, the Examiner will assume that both a and b are .5 such that when a is .5 and b is .5, the total is 1. Note that Table 2 indicates that $y < (3a + 2b)$ (i.e. the sub-stoichiometric amount). Since $(3a + 2b)$ is 2.5 one could select as a y value of 2. Thus one can use $2/(2.5)$ as an amount of Na. This is in processing step 1. of Table 2. Going to processing step 3, however, one uses $(1-y)/(3a+2b)$ as an amount of $\text{NaC}\equiv\text{CH}$. The confusion lies in the fact that, for this example, $1-y$ is -1 and a negative amount of $\text{NaC}\equiv\text{CH}$ cannot be used. The only time a positive amount of $\text{NaC}\equiv\text{CH}$ is used would be when y is < 1 and the only time applicants' alleged "in excess of sub-stoichiometric amount" is used is when $y < .5$. There is nothing in the specification that indicates that such values are necessary or even contemplated.

Adding to this confusion, note a y value that will result in the alleged "in excess of sub-stoichiometric amount" will not result in a complete reaction of the chlorosilane groups, which from lines 3 to 6 of page 57 is what is intended. For instance, a y value of .4 will result in $(.4/(2.5))$ as an amount of sodium and $(.6/(2.5))$ as an amount of $\text{NaC}\equiv\text{CH}$. This will result in only $1/(2.5)$ of the Cl sites reacting. Clearly this Table raises questions as to what is, in fact, being disclosed.

Appropriate correction is required.

The Examiner apologizes for not bring this to applicants' attention sooner. She only became aware of this confusing during a detailed review of this section of the specification looking for support for the claim language.

While the above explanation detailed only the confusion in this one table, applicants are urged to review and correct other table as well to eliminate any confusion found in the entire specification.

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4. Claims 61, 62 and 69 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims refer to "the partially polymerized polyorganochlorosilane" but no such product is found in the claims upon which they depend. These claims lack antecedent basis. Also reference to "the second reacting step" lacks antecedent basis. It would appear that this should read " the second adding step".

5. Applicant is advised that should claims 62 to 64 be found allowable, claims 70 to 72 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

6. Claim 65 is allowed. The prior art fails to teach or suggest such a process. See for instance Chandra et al. which 1) fails to teach condensing the chlorosilanes in the presence of sodium and 2) fails to teach a sodium acetylide reactant. 4,800,221 and 4,940,767 both teach reaction compositions in which a difunctional acetylene reactant is used, rather than the monofunctional sodium acetylide required by the claims. Note that the previous office actions indicated that the claimed process was, in fact, allowable over the prior art.

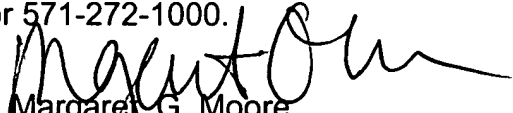
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
5/30/06